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A New Genus and New Species of the Oxytelinae from Brazil (Coleoptera, Staphylinidae)

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Concurrent with my work on a generic revision of the staphylinid subfamily Oxytelinae, specimens of a new species representing an undescribed genus have been studied. This very distinctive oxyteline from Brazil was recognized as being undescribed by Max Bernhauer, but, after the specimens were deposited in the Prague Museum, a description was never published. For reasons given in the discussion, this genus is assigned to the Coprophilini.

CRASSODEMUS, NEW GENUS

TYPE SPECIES: *Crassodemus foraminosus*, new species, designated here.

DESCRIPTION OF GENUS: Labrum (fig. 1) with moderately deep, broadly V-shaped emargination; labral lobes absent. Mandibles denticulate (figs. 2-4, 7). Maxillary palpus (fig. 6) with basal segment reduced; second and fourth segments elongate, slender, and of nearly equal length; second segment apically incrassate; third segment long, slender, and shorter than second or fourth segments; fourth segment acuminate apically from base and with base nearly as wide as apex of third segment. Labial palpus (fig. 5) long and stout; basal segment longest; apical segment slightly longer than second; basal segment with long

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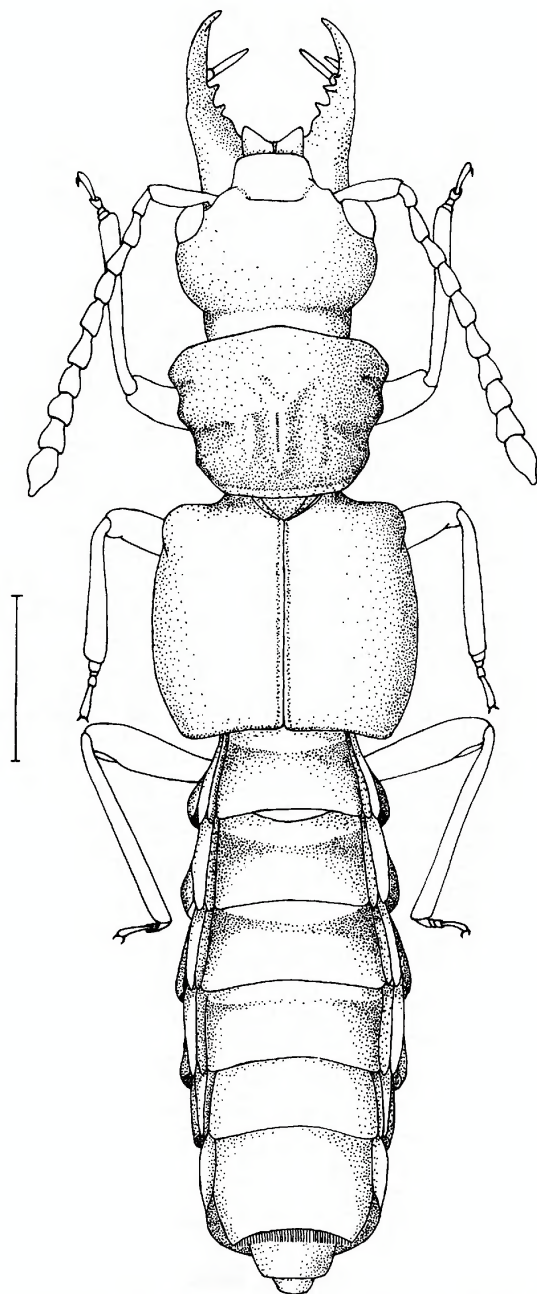


FIG. 1. *Crassodemus foraminosus*, new genus and species, habitus of holotype, male.

setae on mesial side. Gular sutures confluent along entire length. Epistomal suture (fig. 1) present and straight, with lateral end arcuate at intersection with supra-antennal ridge. Supra-antennal ridge low but distinct and well developed. Antenna unmodified. Base of head constricted to form distinct, well-defined, broad neck.

Pronotum (fig. 1) wider than long at widest point and slightly wider than head; of trapezoidal shape, with lateral margin posteriorly convergent. Pronotal lateral marginal bead present. Protergosternal suture absent. Procoxal fissure present, short, and closed. Protrochantin concealed. Postprocoxal lobe present, very short, and obsolete. Prosternal process carinate; process extending only short distance between coxae.

Scutellum with transverse ridge. Elytral epipleural and hypopleural ridges present. Mesosternal process elongate and stout; process broad, prominent, and becoming broadly acuminate apically. Mesocoxae narrowly separated by mesosternal process. Metasternal process absent. Metasternum with low, rounded ridge between mesocoxae; ridge with base abutting to apex of mesosternal process. Metakatepisternum strongly delimited.

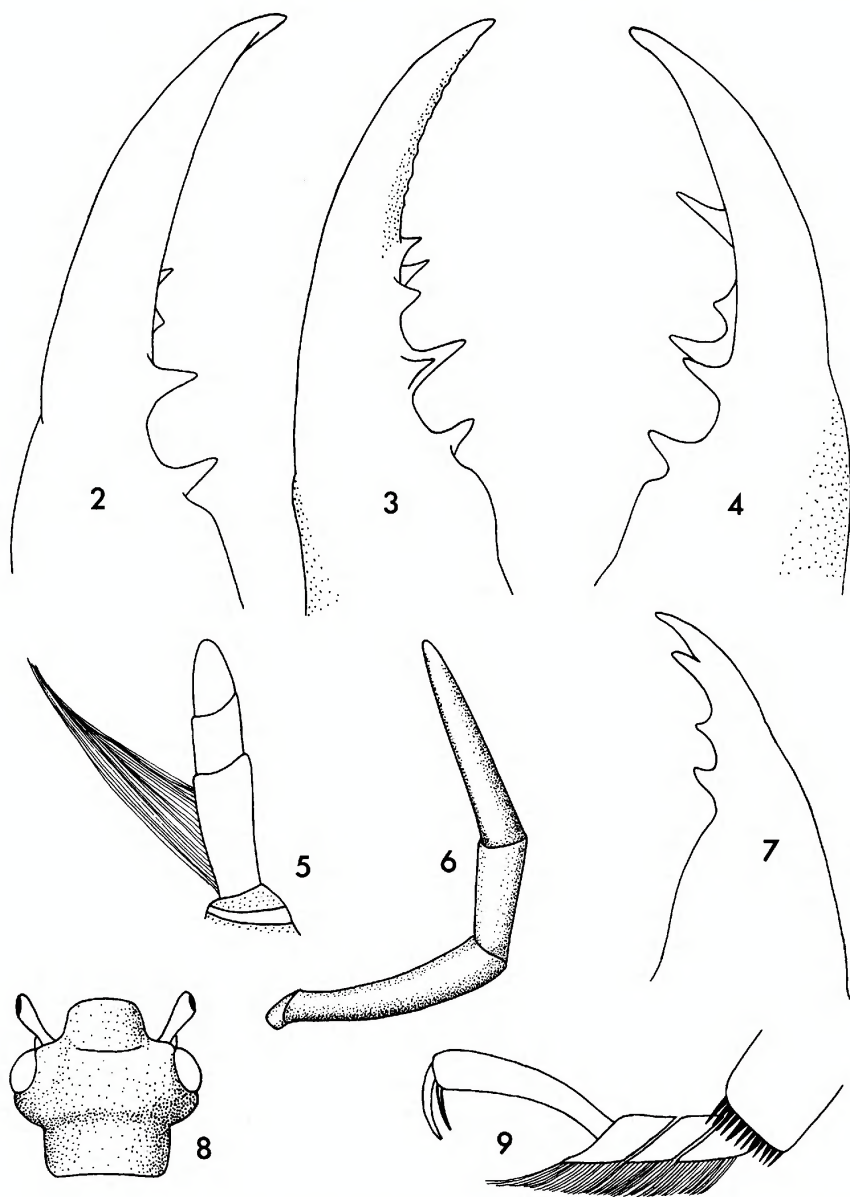
Legs elongate and slender. Tibia slender and apically incrassate; surface with many decumbent spinules and many setae; longitudinal row of spines absent; apical ctenidium of spines encircling apex present. Tarsal formula 4-4-4 (fig. 9); basal three articles broad and closely associated; first longer and broader than second or third; second and third of approximately equal length and width; basal three articles with long, dense pubescence on ventral surface; fourth article slender, elongate, and apically incrassate; fourth article longer than basal three combined.

Abdomen with second sternite well developed.¹ Segments 2-6 each with two laterosclerites (fig. 1). Tergites with basolateral ridge absent. Seventh tergite (fig. 1) with posterior margin fimbriate; fimbriation increasingly long from lateral portion to middle. Eighth tergite with posterior margin broadly rounded. Ninth segment (fig. 14) with pygidial sac openings present in pleuron; pygidial sacs present.

DIAGNOSIS: The tarsi of most of the Oxytelinae each have two, three, or five articles. The four articles of the tarsi of *Crassodemus* will therefore separate it from most of the other genera.

From *Bledius*, which has tarsi of four articles, and allied genera, *Crassodemus* is separated by the elongate, slender fourth segment of the maxillary palpus and the absence of a longitudinal row of tibial spines. From

¹ The abdomen of many staphylinids is composed of six sclerites. There is question in my mind concerning the morphological derivation of these sclerites. Pending further investigation, I am using the diminutive form of terminology for these sclerites.



FIGS. 2-9. *Crassodemus foraminosus*, new genus and species. 2. Left mandible, male, dorsal view. 3. Left mandible, male, three-quarter mesial surface view. 4. Right mandible, male, dorsal view. 5. Labial palpus. 6. Maxillary palpus. 7. Right mandible, female, dorsal view. 8. Head capsule, female, dorsal view. 9. Mesotarsus, lateral view.

Planeustomus, the only other genus of the Coprophilini known with a 4-4-4 tarsal formula, this genus can be recognized by the confluent gular sutures, the short procoxal fissure, the absence of a tergoventral suture, the absence of a pseudosegment between the first and second tarsomeres, the presence of the dense pubescence on the ventral surface of the compressed basal three articles of the tarsi, and the lack of long, slender labral lobes. *Toxoderus*, a coprophiline from Australia, actually has five tarsomeres not four as stated in the original description.

Additional characters useful for identification of *Crassodemus* are the broad neck and the presence of a pronotal marginal bead and elytral epipleural ridge. This genus can be identified by the use of a recent key to the Coprophilini (Moore, 1964, p. 57) and the addition of a third alternative to couplet 4. *Crassodemus* has four tarsomeres, whereas the other two genera in this couplet have five.

Crassodemus foraminosus, new species

HOLOTYPE: Male, São Paulo, Brazil (Mraz); in the National Museum, Prague, Czechoslovakia.

PARATYPES: Two females, São Paulo, Brazil (Mraz); one in the collection of W. O. Steel to be deposited in the British Museum (Natural History).

DESCRIPTION OF HOLOTYPE: Male (fig. 1). Approximately 7 mm. long. Head and prothorax piceous; elytra and abdomen dark rufous; legs lighter piceous.

Labrum with long, stout setae on anterior margin; additional scattered setae present; mid-longitudinal line present. Mandibles with dorsal and ventral, moderately well-defined grooves on laterobasal region. Right mandible (fig. 4) with five denticles; left mandible (figs. 2, 3) with six denticles; left and right mandibles each with denticles arranged differently. Maxillary palpus (fig. 6) long and slender. Labial palpus (fig. 5) with long, dense, prominent pubescence on mesoventral surface of basal segment. Mentum and submentum with distinct, moderately dense punctation. Submental suture sinuate laterally; suture strongly angulate at intersection with gular sutures. Base of head with ridge on ventral, posterior margin. Neck and head delimited from each other by distinct, encircling groove. Clypeus with weak, scattered, setigerous punctation. Dorsum of head with dense, randomly arranged, umbilicate, coarse, distinct punctation; impunctate regions scattered, randomly arranged, and shining.

Pronotal length/width ratio: 1.32; 1.56 mm. long; 1.18 mm. wide;

with median, impunctate, longitudinal, broad ridge; ridge with short, mid-longitudinal groove; ridge with lateral margins convergent posteriorly (fig. 1). Pronotum with dense, coarse, randomly arranged, umbilicate, setigerous punctation; with broad, lateral, longitudinal, impunctate region; with many additional scattered, less-defined, impunctate regions; punctation becoming setigerous tuberculation laterally; lateral margin strongly sinuate and posteriorly convergent (fig. 1). Procoxal fissure with shallow groove extending from apex dorsally to near marginal bead. Hypomeron lacking pubescence. Prosternum with broad, moderately deep, transverse impression; with margin anterior to procoxae deflexed. Prosternum sparsely pubescent.

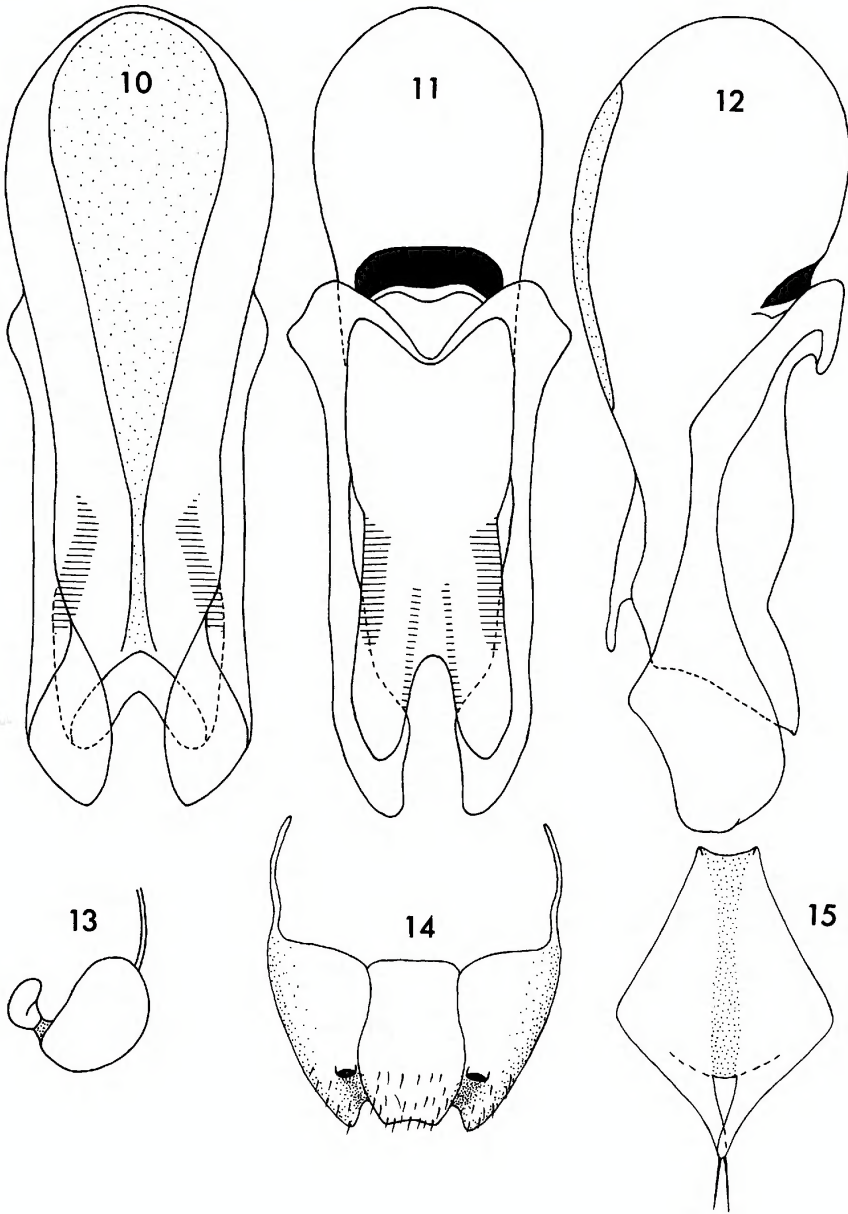
Scutellum lacking pubescence. Elytra 1.54 mm. long, 1.94 mm. wide (combined width); with coarse, dense, uniform, deep, setigerous punctation; with posterior margin deflexed; posterior margin lacking membranous lobes. Elytral suture with distinct ridge. Metathoracic wings present and well developed.

Abdominal tergites shining and sparsely pubescent; segments 2, 3, and 4 with basal, transverse impression; remaining segments lacking well-developed transverse impression. Laterosclerites 2-6 with longitudinal impression; apices free, not attached to tergites, sternites, or one another. Abdominal sternites with pubescence more dense than on tergites. Seventh sternite with posterior margin broadly and shallowly emarginate; emargination bordered laterally with longer and more stout setae. Sixth sternite with long, stout setae in similar position as on seventh sternite but posterior margin truncate.

Aedeagus (figs. 10-12) 1 mm. long; trilobed. Median lobe bulbous; with most of dorsal surface membranous; with transverse, median orifice; with apical ostium. Parameres extending beyond apex of median lobe; stout; apex strongly expanded and spatulate; apex with mesial side "scooped-out."

FEMALE: The sexes are strongly dimorphic. The compound eyes (fig. 8) of the female are relatively longer than the eyes of the male and are nearly equal to the length of the postocular region of the head. The mandibles of the female, both with three denticles (fig. 7), are shorter than the mandibles of the male. The sixth and seventh abdominal sternites of the female are unmodified, but the ninth (fig. 15) differs from the elongate, slender sternum of the male. The anterior margin of the ninth abdominal segment of the female lacks the long, slender strut characteristic of the male (fig. 14). The spermatheca is as shown in figure 13.

VARIATION: The groove extending dorsally from the procoxal fissure



FIGS. 10-15. *Crassodemus foraminosus*, new genus and species. 10. Aedeagus, dorsal view. 11. Aedeagus, ventral view. 12. Aedeagus, lateral view. 13. Spermatheca. 14. Ninth abdominal segment, male, dorsal view. 15. Ninth sternum, female, ventral view.

may be obsolete or absent, and the longitudinal impression on the abdominal laterosclerites may be absent. The color varies from dark rufous to piceous.

REMARKS: The name *Pachyphloeus mrazi* was used by Bernhauer on a label on one of these three specimens. This fact is recorded in case there are additional specimens bearing either of these names that have been deposited in other museums.

DISCUSSION

Crassodemus, for the present, is placed in the Coprophilini because it shares with the coprophiline genera the procoxal fissure, the elongate mesosternal process that separates the mesocoxae, and the elongate fourth segment of the maxillary palpus. With some members of the Carpelimini, *Crassodemus* shares a reduced procoxal fissure, the absence of the protergosternal suture, and the compressed structure of the basal three tarsal segments. There seems to be no obvious similarity of *Crassodemus* to other extant genera, but, because of the advanced characters shared with the Carpelimini, this genus is considered an advanced member of the Coprophilini near the former tribe.

ACKNOWLEDGMENTS

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